BIBLIOGRAPHICAL NOTICE.

Dei Funghi sospetti e velenosi del Territorio Sienese. Per FRANCESCO VALENTI-SERINI, M.D. Pubblicato sotto gli auspicii e per cura della Reale Accademia di Medicina di Torino. Torino, 1868. [On the Suspected and Poisonous Fungi of the Territory of Siena. By Dr. F. VALENTI-SERINI. Oblong folio. With 56 coloured plates.]

THIS very important contribution to cryptogamic botany is from one who has devoted many years of study to the discrimination of the different species of Fungi, chiefly with a view to determine which are those safe for the use of man as food. Dr. Valenti-Serini is the author of many works upon mycology, one of which is a general "Flora Micologica" of the Sienese territory, in two large folio volumes. Upper Italy is a country in which these plants are abundant and extensively eaten, and where accidents from the employment of poisonous ones by mistake are not unfrequent. Hence the interest attached to the selection of those that are safely edible. In a former work the author embraced the whole of the fungi, edible and poisonous, and reproduced them in relief, in terra cotta, coloured after nature. This work also was a mycology applied to hygiene and toxicology, and was prepared primarily to teach his countrymen which species and varieties are to be selected, and which to be rejected.

After the manuscript of the present volume, accompanied by the drawings (now very carefully reproduced in fifty-six coloured lithographs), had been presented to the Academy of Medicine of Turin, an elaborate report upon it was laid before the Academy by Professor Antonio Garbiglietti, which pointed out the great value of Dr. Valenti-Serini's manuscript, and recommended its publication; besides which, terra-cotta facsimiles of these dangerous fungi, and the drawings also, have been placed in a cabinet in the museum of the Academy, in order that they may be consulted and studied by those who resort to this museum.

We will give the title of Dr. Garbiglietti's report below, by which it will be seen that he enhanced his services to botanical science by accompanying it with an extended Catalogue of the Fungi of the neighbourhood of Turin and the whole of Upper Italy*. This catalogue embraces 500 species, and, besides other matters, gives the places of their growth and their qualities. It is a valuable work, and well deserved to be published by the Academy in a separate form \dagger .

* Intorno all'opera manoscritta del Dr. F. Valenti-Serini, sopra i Funghi sospetti e velenosi del Terr. Sienese, Relazione del Socio Dott. Collegiato Cav. Antonio Garbiglietti. Coll'aggiunta di un Catalogo compilato per cura dello stesso Relatore. Torino, 1864.

† Catalogo delle principali Specie di Funghi crescenti nei contorni di Torino ed in altre Provincie degli antichi Stati Sardi di Terra ferma, disposte secondo il Sistema Micologico di Fries, compilato per cura del Dott. Coll. Cav. Antonio Garbiglietti, M.D. Torino, 1867.

The great object of Dr. Valenti-Serini, which has instigated his labours and stimulated him to persevere in them, has been to avert the sufferings occasioned by using these deleterious cryptogams as articles of food. Although in our islands fungi are by no means so commonly and so indiscriminately eaten, it is reported that the Society of Arts is making efforts to show that, with some exceptions which are easily identified, most of the fungi of England are safe articles of diet: so that it seems likely their use may be extended. Those who may be induced to consult this excellent work of an Italian physician, of great and long-continued knowledge and experience, will not be at all encouraged in this view with respect to fungi said to be sanctioned by the Society of Arts. Indeed it may be safely asserted that, except in the case of the well-known and very distinct species universally found to be edible and wholesome, they will receive at Dr. Valenti-Serini's hands every kind of discouragement.

This is not, perhaps, the proper place in which to dwell upon this momentous hygienic question; nevertheless it seems desirable to state some of the results obtained by Italian botanists. Dr. Valenti-Serini goes so far as to say that such are the changes these plants undergo in their brief existence, and such the slight and fleeting nature of the peculiarities which distinguish one species from another, that it is often exceedingly difficult, if not impossible, to discriminate the poisonous from the wholesome. And Dr. Garbiglietti states that circumstances influencing the vegetation (such as soil and season), he considers, may impart poisonous properties to fungi usually regarded This may in some measure account for the diversity of as edible. opinions held with regard to the qualities of one and the same species in different countries. Agaricus necator may be taken as one example. Dr. Valenti-Serini takes the names of necator and torminosum as in themselves suspicious; and Bulliard, Schæffer, Roques, and Larber call it poisonous. Still Letteillier says he has eaten it without detriment; and Venturi states that in his province of Brescia it is eaten; yet it must be confessed that it is there the custom to boil it in a large quantity of water, when it is quite innocent. It should be known that the boiling of poisonous species and other modes of cooking deprive them of their poisonous qualities, which are probably volatile. If, as the author conjectures, these essentially consist in the presence of prussic acid, the fugacious nature of the poison may be readily conceived. Boletus chryseuthereon, the subject of plate 53, is declared by Cordier to be innocent; but both Roques and Paulet prohibit the use of it.

Every fungus is produced from a spore, as every plant is derived from a seed. The aërial portion, which is commonly called the fungus, is not a plant, properly speaking, but a more or less compound fruit, formed of many parts.

After a comprehensive and learned introduction, in which most questions of interest relating to fungi are briefly discussed, the author passes to a description of the species and varieties which are depicted upon the fifty-six fine plates. Some of these may be regarded as new to the Italian flora, or very little known—for instance :—

1. Amanita Vitoni.—This fungus was found for the first time by Dr. Vitoni, of Pistoia, towards the latter end of the last century, and described by him in a memoir addressed to the Academy of Georgofili of Florence. Dr. Vitoni witnessed some dreadful cases of poisoning occasioned by this fungus. Dr. Valenti-Serini regards it as a variety of Amanita bulbosa viridis, which has the laminæ rosy, and which he arranges in a subsection named pseudo-Amanites.

2. Amanita terrea.—Found by the author in 1839; also a pseudo-Amanite. Regarded by Chellini as suspicious.

3. Amanita fulva, which he has placed among the suspicious.

4. Amanita cinerea.—Rejected by the peasants.

5. Agaricus fulvaster, or Amanita Trompeia formosa.—To this handsome variety the 5th plate is dedicated. It may be a variety of Agaricus vaginatus. The peasants regard it as suspicious.

6. Agaricus plumbeus or Amanita Terrachinia plumbea.—Of this also the author is uncertain whether it should be retained as a variety of Agaricus vaginatus.

"Mycologists in treating of Agaricus vaginatus have restricted it to two varieties—livida or plumbea and spadicea or fulva; and it is disputed which of these is good to eat. DeCandolle, Chevalier, Cordier, Descourtilz are of opinion that they are esculent without distinction; Persoon and Pico that they are deleterious and decidedly poisonous. The Italian mycologists, as Venturi and Vittadini, declare them to be innocent, and maintain that in the Bresciano they are commonly used. These last, who are of great weight with our author, recommend the adoption of those only of the variety having the leaden colour, and the rejection of those of nankeen colour, because this variety may be sometimes confounded with some variety of Agaricus pantherinus. The French say they are sold in the Marseilles market." This is a good instance of the uncertainty which surrounds the safe discrimination of some species and varieties.

7. Volvaria Corticelli.—Discovered by the author in May 1862, and believed to be a new species. It appears in plate 8 in all its aspects. Its disgusting odour has led him to suspect its qualities. It is very beautiful, and is dedicated to Prof. Alessandro Corticelli.

8. Agaricus perlatus.—Found in 1862 by the author, and thought by him to be a variety of Agaricus pantherinus.

9. Agaricus margaritiferus.—Found in the same place as the last. The author is inclined to regard this also as a variety of *pantherinus*, and on this ground deserving to be rejected.

We shall be glad if this brief notice should draw the attention of English botanists to the writings of Dr. Valenti-Serini.